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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/681,567	04/30/2001	Walter Dixon III	345708002US	9844

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EXAMINER

GROSS, KENNETH A

ART UNIT	PAPER NUMBER
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2122

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/681,567

Applicant(s)

DIXON ET AL.

Examiner

Kenneth A Gross

Art Unit

2122

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-20, 28-33 and 35-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-20, 28-33 and 35-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to the amendment filed January 27th, 2004.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2-5, 8-11, 14-16, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Sams Teach Yourself Visual Basic 6 in 21 Days" by Greg Perry, Sams, 1998 (hereinafter Perry) in view of Silberbauer et al. (U.S. Patent Number 5,355,493) and further in view of Laskoski (U.S. Patent Number 5,428,554).

In regard to Claim 8, Perry teaches: providing a plurality of definitions of interactions of the program in the form of Visual Basic buttons that allows a user to interact with a program (Page 4, lines 7-10); each interaction having one or more command definitions in the form of Visual Basic code executed in response to the interaction (Page 5, lines 1-4); a view definition in the form of a Visual Basic Window or Dialog Box (Page 3, Figure 1.8); a command having an attribute and a behavior. Perry teaches the concept of a function which takes arguments (attributes) and performs a behavior based on the function code (Page 19); receiving a request by way of an event which lets the program know that a user requests some function to be performed (Page 3, lines 11-12); identifying the interaction associated with the received request by recognizing the user triggered event and performing the associated event procedure (Page 5, lines

Art Unit: 2122

6-9); and providing a response generated by the view associated with the identified interaction.

Perry further teaches for each command of the identified interaction, performing the behavior of the command with input attributes and extracting attributed values of the command by retrieving values of the output attributes of the command. Perry does not teach preparing the command by setting values of input attributes of the command based on attribute values stored in an attribute store and storing the out attributes in an attribute store. Silberbauer, however, does teach storing attribute values (Column 4, lines 24-25), setting values of a function input attributes (Column 4, lines 37-41), and storing output attribute values in an attribute store (Column 4, lines 43-49).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to define interactions of a program with command definitions associated with it where command definitions contain an attribute and a behavior, a view definition, where a request of an interaction is received and the interaction identified, performing the behavior of each command of the interaction, and receiving output variables of the command, and providing a response generated by the view associated with the interaction, as taught by Perry, where the command is prepared by setting values of input attributes of the command based on attribute values stored in an attribute store and storing the out attributes in an attribute store, as taught by Silberbauer, since this allows variables to be saved and accessed at later times.

Neither Perry nor Silberbauer teach that the view definition defines a view with attributes and a behavior, and performing the view includes setting values of input attributes of the view based on attribute values stored in attribute store, and performing the behavior of the view with the attributes. Laskoski, however, does teach a display function that performs a display behavior and takes a display threshold attribute (Column 4, lines 12-14). Once the attribute is set, the

display function performs the display behavior and displays data on the screen. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to perform the method in the paragraph above, shown to be obvious in the combination of Perry and Silberbauer, where the view definition defines a view with attributes and a behavior, and performing the view includes setting values of input attributes of the view based on attribute values stored in attribute store, and performing the behavior of the view with the attributes, as taught by Laskoski, since this allows output of a command to be displayed on a computer screen so that a user can view output data.

In regard to Claims 2-5, 9-11, 14-16, 19, and 20, for the rejections of these Claims, see the office action mailed on November 5th, 2003 (Note: Claims 2-5, 10, 14-16, 19, and 20 have been amended to fix dependency issues relating to the cancellation of Claim 1, and the scope of the rejections has not changed).

3. Claim 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over “Sams Teach Yourself Visual Basic 6 in 21 Days” by Greg Perry, Sams, 1998 (hereinafter Perry) in view of Silberbauer et al. (U.S. Patent Number 5,355,493) and further in view of Laskoski (U.S. Patent Number 5,428,554) and Limondin et al. (U.S. Patent Number 6,226,783).

In regard to Claims 6 and 7, see the office action mailed on November 5th, 2003 (Note: Claim 6 has been amended to fix dependency issues relating to the cancellation of Claim 1, and the scope of the rejections has not changed).

4. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over “Sams Teach Yourself Visual Basic 6 in 21 Days” by Greg Perry, Sams, 1998 (hereinafter Perry) in view of Silberbauer et al. (U.S. Patent Number 5,355,493) and further in view of Laskoski (U.S. Patent

Art Unit: 2122

Number 5,428,554) and "Understanding JavaServer Pages Model 2 Architecture", by Govind Seshadri, December 1999 (hereinafter Seshadri).

In regard to Claim 12, see the office action mailed on November 5th, 2003.

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over "Sams Teach Yourself Visual Basic 6 in 21 Days" by Greg Perry, Sams, 1998 (hereinafter Perry) in view of Silberbauer et al. (U.S. Patent Number 5,355,493) and further in view of Laskoski (U.S. Patent Number 5,428,554) and "What is ASP?" by Dave Beauchemin, 4/12/2000 (hereinafter Beauchemin).

In regard to Claim 13, see the office action mailed on November 5th, 2003.

6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over "Sams Teach Yourself Visual Basic 6 in 21 Days" by Greg Perry, Sams, 1998 (hereinafter Perry) in view of Silberbauer et al. (U.S. Patent Number 5,355,493) and further in view of Eisenberg et al. (U.S. Patent Number 5,572,671).

In regard to Claim 17, see the office action mailed on November 5th, 2003.

7. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over "Sams Teach Yourself Visual Basic 6 in 21 Days" by Greg Perry, Sams, 1998 (hereinafter Perry) in view of Silberbauer et al. (U.S. Patent Number 5,355,493) and further in view of Hayashi (U.S. Patent Number 4,992,971).

In regard to Claim 18, see the office action mailed on November 5th, 2003.

8. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Travostino et al. (U.S. Patent Number 6,564,325) in view of Shapiro et al. (U.S. Patent Number 5,257,363).

In regard to Claim 28, see the office action mailed on November 5th, 2003.

Art Unit: 2122

9. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Travostino et al. (U.S. Patent Number 6,564,325) in view of Shapiro et al. (U.S. Patent Number 5,257,363) and further in view of Stavran (U.S. Patent Number 6,012,149).

In regard to Claim 29, see the office action mailed on November 5th, 2003.

10. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Travostino et al. (U.S. Patent Number 6,564,325) in view of Shapiro et al. (U.S. Patent Number 5,257,363) and further in view of Hildebrandt (U.S. Patent Number 5,535,390).

In regard to Claim 30, see the office action mailed on November 5th, 2003.

11. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Travostino et al. (U.S. Patent Number 6,564,325) in view of Shapiro et al. (U.S. Patent Number 5,257,363) and further in view of Hildebrandt (U.S. Patent Number 5,535,390) and Nock (U.S. Patent Number 6,038,565).

In regard to Claim 31, see the office action mailed on November 5th, 2003.

12. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Travostino et al. (U.S. Patent Number 6,564,325) in view of Shapiro et al. (U.S. Patent Number 5,257,363) and further in view of Bland et al. (U.S. Patent Number 5,960,441).

In regard to Claim 32, see the office action mailed on November 5th, 2003.

13. Claims 33, 35, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Limondin et al. (U.S. Patent Number 6,226,783) in view of Fujii et al. (U.S. Patent Number 6,032,198) and further in view of Neeman et al. (U.S. Patent Number 5,519,855) and Lebow (U.S. Patent Number 6,243,862).

In regard to Claim 33, Limondin teaches a data structure including a command descriptor (Figure 5, item 200) identifying an object class (Column 4, lines 35-37), the object class defining input and output variables (Figure 5, items 510 and 234) and having a perform method (Figure 7, item 650). The program is executed by instantiating objects and setting input attribute values of objects based on output values of objects (Column 4, lines 42-45) and running the perform method (Column 3, lines 3-4). Limondin teaches that the commands are organized into associations (Column 4, lines 35-40). Limondin does not teach a first object class to retrieve a current application context of the application. Fujii, however, does teach a function for retrieving an application context (Column 5, lines 6-11). Neither Limondin nor Fujii teach a third and a fourth object class for identifying asset attributes and storing an entry in a catalog. Neeman, however, does teach identifying asset attributes (Column 11, lines 3-4) and storing an entry in a catalog (Column 11, lines 5-10). Neither Limondin nor Fujii nor Neeman teach a second a fifth object class for starting and ending a transaction. Lebow, however, does teach functions for starting and ending a transaction (Column 11, lines 58-62). Note, that the references Fujii, Neeman, and Lebow only teach functions for carrying out their respective tasks, not object classes. However, Limondin does teach the benefit of encapsulating functions in object classes, and so it is a natural step to encapsulate the functions taught by Fujii, Neeman, and Lebow into object classes, as taught by Limondin. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to build a data structure including a command descriptor identifying an object class, the object class defining input and output variables and having a perform method, where the program is executed by instantiating objects and setting input attribute values of objects based on output values of objects and running the perform

method, and the commands are organized into associations, as taught by Limondin. The data structure further includes a first object class to retrieve a current application context of the application, as taught by Fujii, since this allows users to analyze and use application data, a third and a fourth object class for identifying asset attributes and storing an entry in a catalog, as taught by Neeman, since this allows encapsulated functions for database entry, and a second a fifth object class for starting and ending a transaction, as taught by Lebow, since this allows for proper initialization of a transaction to take place, and proper ending functionality to take place.

In regard to Claim 35, for logic behind the rejection of the limitations of Claim 35, see the office action mailed on November 5th, 2003.

In regard to Claim 40, for logic behind the rejection of the limitations of Claim 40, see the office action mailed on November 5th, 2003.

14. Claims 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Limondin et al. (U.S. Patent Number 6,226,783) in view of Fujii et al. (U.S. Patent Number 6,032,198) and further in view of Neeman et al. (U.S. Patent Number 5,519,855), Lebow (U.S. Patent Number 6,243,862) and "Sams Teach Yourself Visual Basic 6 in 21 Days" by Greg Perry, Sams, 1998 (hereinafter Perry).

In regard to Claims 36-38, for logic behind the rejection of the limitations of Claims 36-38, see the office action mailed on November 5th, 2003.

15. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Limondin et al. (U.S. Patent Number 6,226,783) in view of Fujii et al. (U.S. Patent Number 6,032,198) and further in view of Neeman et al. (U.S. Patent Number 5,519,855), Lebow (U.S. Patent Number 6,243,862) and Bland et al. (U.S. Patent Number 5,960,441).

In regard to Claim 39, for logic behind the rejection of the limitations of Claim 39, see the office action mailed on November 5th, 2003.

16. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Limondin et al. (U.S. Patent Number 6,226,783) in view of Fujii et al. (U.S. Patent Number 6,032,198) and further in view of Neeman et al. (U.S. Patent Number 5,519,855), Lebow (U.S. Patent Number 6,243,862) and Eisenberg et al. (U.S. Patent Number 5,572,671).

In regard to Claim 41, for logic behind the rejection of the limitations of Claim 41, see the office action mailed on November 5th, 2003.

Response to Arguments

17. Applicant's arguments filed January 27th, 2004 have been fully considered but they are not persuasive.

In regard to Claim 33, the applicant argues that neither the Limondin reference nor the other prior art of record teaches the five object classes now present in amended Claim 33. The applicant is directed above to newly rejected Claim 33 above for art that overcomes the amendment.

In regard to Claim 8, the applicant argues that Laskoski has nothing to do with creating an interface to allow a user command input or calling functions from the host computer, as taught by Perry and Silberbauer, and thus, one skilled in the art would have no reason to incorporate features of a graphical program analysis utility such as the one disclosed in Laskoski (Page 14, Paragraph 2). However, Laskoski is not introduced for its function, but rather is introduced for the feature of a display function that takes input to perform a displaying

Art Unit: 2122

functionality and how it associates with a view definition with attributes. Laskoski does teach displaying output data, but is more concerned with the displaying aspects of this, and how it associates with the view definition.

In regard to Claim 17, the applicant states that there is nothing in Perry nor Silberbauer that is concerned with programming for safety critical applications, and so these references would not look to Eisenberg to overcome these deficiencies. However, Eisenberg teaches providing a safety for applications that could potentially error, where the application software in Perry and Silberbauer can benefit from this safety system. Furthermore, Eisenberg teaches a rule set for a particular application software (Column 2, lines 1-5) and thus the rules are built into a command definition (Figure 1, item 12).

In regard to Claim 28, the applicant states that Shapiro teaches supplying actual parameters, instead of parameter names, as taught in the current application (Page 16, Paragraph 3). However, its is obvious that parameter names and parameters themselves are interchangeable, since parameter names represent placeholders or pointers to the actual parameter.

Conclusion

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

Art Unit: 2122

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth A Gross whose telephone number is (703) 305-0542.

The examiner can normally be reached on Mon-Fri 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KAG

A handwritten signature in cursive script, reading "Anthony Nguyen-Ba".

**ANTONY NGUYEN-BA
PRIMARY EXAMINER**